

**Appl. No. 09/684,488**  
**Amdt. dated July 12, 2004**  
**Reply to Office action of May 17, 2004**

**Amendments to the Specification:**

Please replace the paragraph beginning at page 14, line 14 with the following amended paragraph:

The index  $i$  is utilized to represent the partition to which a data point  $x$  currently belongs or is a member of, and the index  $j$  is utilized to represent the partition that is currently being evaluated for a potential move to which the data point  $x$  can be moved. This embodiment of the present invention provides the following predetermined metric for evaluating whether a set of data points should be moved from the current partition to a proposed or potential partition:

$$\frac{n_i}{n_i - |U|} |m_u - m_i|^2 - \frac{n_i}{n_j + |U|} |m_u - m_j|^2$$

where  $U$  is the subset of data points ( $U$  is a subset of  $S_i$ ) being evaluated for the move,  $|U|$  is the size of  $U$  that is specified by the size parameter,  $m_u$  is the geometric center of  $U$ ,  $m_i$  and  $m_j$  are the centers of the clusters and  $n_i$  and  $n_j$  are the counts of the clusters.